# The Recent Trend of Accounting Digitalization Research – A Systematic Review of Regarding Cloud Accounting

# Keita KANO<sup>†</sup>

#### Abstract

This study conducted a systematic literature review of cloud accounting, focusing on studies reported in major databases between 2012 and 2022. The purpose of this study was to organize the literature on cloud accounting among the advanced digital technologies to date and to summarize the results to date and the research discussion points. And to obtain guidelines on how to proceed with future research. The survey results indicate that there is growing interest in research on cloud accounting. Furthermore, research on cloud accounting has evolved from broad analyses to targeted research on specific issues. Among these, SMEs, the impact on business performance and security are the issues that have attracted attention. In addition, research on the role and education of accountants has recently been conducted. In the future, it will be necessary to provide knowledge through a complex investigation combining the accumulation of past research and advanced digital technologies other than cloud accounting (big data, blockchain, robotic process automation, and AI).

**Keywords**: cloud accounting, systematic literature review, digitization, digital technology

### **1. Introduction**

Advanced digital technologies (cloud computing, artificial intelligence (AI), blockchain, and big data) are being applied to corporate practices in a wide range of fields. These advanced digital technologies are streamlining tasks, including those related to accounting work, and changing the nature of work that has been done in the past. Jaimovich and Siu (2019) noted that computers are displacing medium-wage, routinized work and, polarizing work into high-wage and low-wage They noted that this will result in the creation of a new type of work. And there is also a discussion about highly skilled people being more creative and more productive in their work activities (Nedelkoska & Quintini, 2018). The use of these various advanced digital technologies has also impacted accounting practices, with the automation of accounting tasks resulting in significant cost and time savings (Kokina &

<sup>†</sup> Assistant Professor, Faculty of Regional Development, Prefectural University of Hiroshima & Ph.D Student, Graduate School of Business Administration, Kwansei Gakuin University, Japan

Blanchette 2019).

In particular, cloud computing-based services are being used in many business operations. according to a 2021 Gartner Japan study, the average usage rate of cloud services in Japan is 22%, up 4 percentage points from 2020, used for cloud accounting, etc. In the form of Software as a Service (SaaS), the average usage rate increased by 8 points to 39%<sup>1</sup>. Furthermore, cloud accounting, which applies cloud technology to accounting operations, is one technology that is becoming increasingly popular in many countries. Cloud accounting is the application of cloud computing technology, which uses computer resources such as data and applications via a network, to accounting practices (Dimitriu & Matei 2015). According to a survey of sole proprietors in Japan, 29.8% of firms using accounting software were using cloud accounting software as of the end of April 2022, up from 26.3% in the April 2021 survey<sup>2</sup>. Thus, the shift to cloud computing for corporate financial systems is progressing in Japan, led by cloud accounting vendors such as freee and Money Forward.

Prior studies have been conducted on the impact of the introduction of advanced digital technology on accounting operations, companies, accountants, and tax accountants. However, there is a paucity of literature that has organized the contents of previous studies on cloud accounting and what the challenges are there. Therefore, this study reviews previous studies focusing on advanced digital technologies, especially cloud accounting. The purpose of this paper is to identify the challenges and findings to date regarding advanced digital technologies, the research areas in which they have been conducted, and the research gaps that guide for future research. This research will provide suggestions to researchers who will be researching on advanced digital technologies, to firms, and to accountants and tax accountants on how to handle new technologies, particularly cloud accounting.

The purpose of this study is to organize the literature on cloud accounting among the advanced digital technologies to date and to summarize the results to date and the issues that have been discussed in the research. And to obtain guidelines on how to proceed with future research.

# 2. Research Methodology<sup>3</sup>

In this paper, a Systematic Literature Review (SLR) will be conducted. To do so, it is important to first delimit the research area, identify and select relevant literature, and establish a protocol for review and synthesis (Seuring & Muller 2008). In this paper, the review is conducted according to the steps of SLR proposed in the methodology of Denyer

<sup>&</sup>lt;sup>1</sup> Gartner Japan (2021)

<sup>&</sup>lt;sup>2</sup> MM Research Institute (2022)

<sup>&</sup>lt;sup>3</sup> Based on the research methodology of Novais et al. (2019).

and Tranfield (2009): 1) establish a research question, 2) identify studies, 3) select and evaluate studies, 4) analyze and integrate, and 5) present results and discussion. Below is a brief description of these five steps and how they were implemented within the specific framework of this study.

1) Establishment of Research Question (Research Problem)

The following research questions were determined for the purpose of this study.

- RQ: What are the previous findings, research areas conducted, and research gaps regarding advanced digital technology and cloud accounting in the accounting field?
  - The three specific research questions are as follows.
- RQ1: How much research knowledge has been accumulated on cloud accounting?
- RQ2: What are the main research directions on cloud accounting?
- RQ3: What are the gaps with previous research and future research directions?

RQ1 and RQ2 are preliminary questions for the review and are used to identify what has already been researched in the digital cloud accounting field; the answers to RQ1 and RQ2 form the basis for the answers to RQ3, allowing us to identify future research directions in digital cloud accounting.

# 2) Identification of research

To investigate research on cloud computing in the accounting field, which is the research question, we will search for relevant studies. Here, searches were conducted from major databases (ProQuest Central, ScienceDirect, and Web of Science). To identify articles on cloud accounting in the accounting field, the term "cloud accounting" was selected and this term was assumed to appear in the title, abstract, or text of the article. In addition, given that the digital cloud is a new technology, the time frame of the search was limited to 10-year from 2012 to 2022 for the review. The following is the search process and results for the three main databases.

# **ProQuest Central**

"cloud accounting" was used for 7,718 articles (all years). The source type was then set to "Scholarly Journals" and the number of articles was reduced to 186. The number of articles was narrowed down to 153 by selecting "Article" as the Document type, and 59 articles were identified by selecting "Accounting" as the subject.

## ScienceDirect

The term "cloud accounting" was selected, and a search was conducted assuming that this

### Keita KANO

term appeared in either the title, abstract, or text of the article (169 articles were identified, starting in 2012). Subsequently, 111 articles were identified by setting the Article type as "Research articles. Then, 18 articles were identified by setting Subject areas to "Business, Management and Accounting".

# Web of Science

The term "cloud accounting" was selected and a search was conducted assuming that this term appeared in the title, abstract, or text of the article (61 articles: all years). 23 articles were identified by setting the document type as "article".

As a result, 100 articles were identified.

### 3) Selection and evaluation of studies

After the above research, the abstracts, methodologies, main results, and conclusions of the identified articles were scrutinized to determine whether they were relevant to the research question. Papers that (a) did not refer to the topic of this study, (b) had duplicate entries, (c) contained books, dissertations, or patents, and (d) were not indexed by the Scimago Journal & Country Rank (SJR)<sup>4</sup> search for journals based on scientific quality indicators, were extracted to identify papers that were consistent with this paper. The papers that were consistent with this paper were selected. In the final stage, a deep reading of the papers was conducted. This process yielded 38 papers for further detailed analysis.

### 4) Analysis and Integration

This systematic literature review integrates prior research to understand the study of digital cloud accounting. This section presents a list of the 38 papers obtained.

No.	Year	Title	Journal Name	Journal (Country)
1	2014	Cloud Accounting - A Technology That May Change the Accounting Profession in Romania.	Audit Financiar	Romania
2	2015	Revolutia Platformelor integrate de gestiune a afacerii pentru "Schimbarea la fata" a profesiei contabille	Audit Financiar	Romania
3	2016	Intellectual capital and business performance	Journal of Intellectual Capital	United Kingdom

The following is the list of papers identified in ProQuest Central.

4 Scimago Journal & Country Rank https://www.scimagojr.com/

4	2017	Accountants and the cloud – Involving the professionals	Business And Economics– Accounting	Romania
5	2017	Emerging information technologies in accounting and related security risks – what is the impact on the Romanian accounting profession	Accounting and Management Information Systems	Romania
6	2018	POTENTIALS FOR APPLYING CLOUD TECHNOLOGY IN ACCOUNTING	Ekonomika	Serbia
7	2019	Bulut Muhasebe ve İşletmelerde Uygulanması	Muhasebe ve Finansman Dergisi	Turkey
8	2020	Digital Accounting and the Human Factor: Theory and Practice	Business And Economics	United Kingdom
9	2020	USE OF CLOUD-BASED ACCOUNTING TECHNOLOGIES IN THE INFORMATION SECURITY SYSTEM	Business And Economics– Accounting	United States
10	2021	THE EFFICIENCY AND EFFECTIVENESS OF THE CYBER SECURITY IN MAINTAINING THE CLOUD ACCOUNTING INFORMATION	Business And Economics– Management	United States
11	2021	THE EFFECT OF THE QUALITY OF ACCOUNTING INFORMATION ON THE PERFORMANCE OF CLOUD ACCOUNTING USERS: ANALYSIS OF THE INTEGRATION OF INFORMATION SYSTEMS SUCCESS MODELS (EMPIRICAL CASE OF CORPORATE ACCOUNTANTS IN INDONESIA)	Journal of Legal, Ethical and Regulatory Issues	United States
12	2021	INTELLECTUAL IMPACT OF CYBER GOVERNANCE IN THE CORRECT APPLICATION OF CLOUD ACCOUNTING IN JORDANIAN COMMERCIAL BANKS-FROM THE POINT OF VIEW OF JORDANIAN AUDITORS	Journal of Management Information and Decision Sciences;	United States
13	2021	Accounting Information System under the Digital Transformation	Oblik i Finansi	Ukraine
14	2022	Informatization of Accounting Systems in Small- and Medium-Sized Enterprises Based on Artificial Intelligence-Enabled Cloud Computing	Computational Intelligence and Neuroscience	United Kingdom
15	2022	Emerging Technologies' Contribution to the Digital Transformation in Accountancy Firms	Electronics	Switzerland
16	2022	An Empirical Framework for Assessing the Digital Technologies Users' Acceptance in Project Management	Electronics	Switzerland

17	2022	Assessing the Intention to Adopt Cloud Accounting during COVID-19	Electronics	Switzerland
18	2022	Credibility Analysis of Accounting Cloud Service Based on Complex Network	Journal of Sensors	United States
19	2022	A Two-Stage SEM–Artificial Neural Network Analysis of Integrating Ethical and Quality Requirements in Accounting Digital Technologies	Systems; Basel	Switzerland
20	2022	Cloud accounting adoption in Thai SMEs amid the COVID-19 pandemic: an explanatory case study	Business And Economics	Netherlands

# The following is the list of papers identified in ScienceDirect.

No.	Year	Title	Journal Name	Journal (Country)
21	2015	External auditors' perceptions of cloud computing adoption in Australia	International Journal of Accounting Information Systems	United States
22	2019	The role of internet-related technologies in shaping the work of accountants: New directions for accounting research	British Accounting Review	United States
23	2021	Cloud-based client accounting and small and medium accounting practices: Adoption and impact	International Journal of Accounting Information Systems	United States

# The following is a list of papers identified in Web of Science.

No.	Year	Title	Journal Name	Journal (Country)
24	2018	Research on the impact of accounting information quality on the investment efficiency based on the cloud accounting investment model	Agro Food Industry Hi-Tech	Italy
25	2019	The absorption and usage of cloud accounting technology by accounting firms in Cape Town for services provided to their clients	African Journal of Science, Technology, Innovation and Development	United Kingdom
26	2020	Prospects and Challenges of Implementing Cloud Accounting in Bangladesh	Journal of Asian Finance, Economics and Business	Korea
27	2020	Cloud accounting risks and mitigation strategies: evidence from Australia	Accounting Forum	United Kingdom
28	2020	Intention to Adopt Cloud Accounting: A Conceptual Model from Indonesian MSMEs Perspectives	Journal of Asian Finance, Economics and Business	Korea

76

29	2021	Cloud-Based Accounting Adoption in Jordanian Financial Sector	Journal of Asian Finance, Economics and Business	Korea
30	2021	ACCOUNTING INFORMATION SYSTEM ADOPTION AMONG INDONESIAN MSMES: A CONCEPTUAL MODEL FOR CLOUD COMPUTING	Journal of Asian Finance, Economics and Business	Korea
31	2022	What Drives Students to Feel the Impact of Online Learning in Using a Cloud Accounting Integrated System?	TEM JOURNAL- TECHNOLOGY EDUCATION MANAGEMENT INFORMATICS	Serbia
32	2022	Effect of high school students' perception of accounting on their acceptance of using cloud accounting	Accounting Education	United Kingdom
33	2022	Factors influencing the implementation of cloud accounting: evidence from small and medium enterprises in Oman	Journal of Science and Technology Policy Management	United Kingdom
34	2022	STUDY ON BENEFITS AND ISSUES OF CLOUD COMPUTING IN ACCOUNTING FOR BUSINESS PERFORMANCE	International Journal of Early Childhood Special Education	Turkey
35	2022	The Impact of Information Technology Methods on Accounting Information Quality: Empirical Evidence From Iran	Journal of Information and Organizational Sciences	Croatia
36	2022	Cloud-based accounting information systems usage and its impact on Jordanian SMEs' performance: the post-COVID-19 perspective	Journal of Financial Reporting and Accounting	United Kingdom
37	2022	Digitization of Accounting: The Premise of the Paradigm Shift of Role of the Professional Accountant	Applied Sciences (Switzerland)	Switzerland
38	2022	PERCEPTION OF STUDENTS AND MASTER STUDENTS FROM THE WESTERN PART OF ROMANIA OVER THE DIGITALIZATION PROCESS IN THE ACCOUNTING EDUCATION	Studies in Business and Economics	Poland

The number of papers on cloud accounting is increasing as shown in Figure 1; we did not find any papers on cloud accounting in 2012 and 2013. There was one paper on cloud accounting in 2014, 2 in 2015, 1 in 2016, 2 in 2017, 2 in 2018, 3 in 2019, 5 in 2020, 7 in 2021, and 15 in 2022. This indicates that interest in research related to these advanced digital technologies has been growing, especially in recent years.

In terms of research content, in the initial phase (roughly 2014-2018), research focused





Figure 1. Trends in Papers on Cloud Accounting from 2012 to 2022



Figure 2. Countries of Journals Published on Cloud Accounting

on the benefits and risks of cloud accounting, while in the mid-term phase (roughly 2019-2022), research focused on specific issues such as business performance and security among

78

the benefits and risks. In the later phase (roughly 2021-2022), research on the drivers of cloud accounting adoption flourished. In recent years, studies of the impact on the role of accountants and studies of the acceptance of cloud accounting in education (Sugahara et al. 2022; Marioara et al. 2022) have been conducted. Various research methods have also been used, especially after 2020, including quantitative research using questionnaires, qualitative research using interviews, and a combination of both.

In terms of countries of journals published, there were 8 in the United States, 8 in the United Kingdom, 5 in Switzerland, 4 in Korea, 4 in Romania, 2 in Turkey, 2 in Serbia, 1 in Croatia, Italy, In total, there were papers in 12 countries. These are summarized in Figure 2, which shows that cloud accounting was the subject of choice in various regions, although the majority of papers were published in the United States and the United Kingdom.

# 3. Results and Discussion

The analysis of the 38 selected papers allowed us to identify the current state of knowledge on digital cloud accounting (RQ1), and research directions (RQ2), and detected gaps and future research directions (RQ3). In Ionescu et al. (2014), the oldest paper on cloud accounting in this study, a literature review and interviews with managers, employees, and students in Romania revealed that advanced digital technologies such as cloud accounting are replacing traditional accounting-related work with critical suggested that while new jobs may be created that require skills such as thinking and consulting, they were cognizant of the fact that certain accounting jobs would be eliminated. Since then, research on advanced digital technologies and cloud accounting has gradually increased. The following sections are divided into 1) the benefits and risks of cloud accounting, 2) how cloud accounting will penetrate companies, and 3) the changing role of professional accountants and educational issues due to advanced digital technology.

### 1) Benefits and Risks of Cloud Accounting

In the early stages of research on cloud accounting, a comprehensive approach to cloud accounting was taken, with a particular focus on the benefits and risks. and benefits and risks of cloud accounting implementation were interviewed. The benefits include reduced IT costs and increased organizational agility (efficiency), while the risks include internal and external security, noting that larger companies tend to perform their accounting operations in private clouds due to the importance of information security and data confidentiality aspects. The report also noted the trend for larger companies to use private clouds for their accounting operations due to the security of information and data confidentiality aspects. Thus, efficiency was cited in many studies as an benefits of adopting accounting applications using cloud computing. For simple bookkeeping tasks and other tasks that have

### Keita KANO

been performed by people in the past, cloud accounting can streamline operations; Rindasu (2017) pointed out that technologies such as cloud accounting bring benefits as well as significant challenges that can affect the overall activities of an organization that empirical studies have demonstrated that aspiring accountants and auditors are becoming more familiar with these new technologies, but are not fully proficient with them, and their current level of knowledge is sufficient to identify the main benefits and challenges. The study also concluded that even though aspiring and professional accountants have an average level of knowledge regarding these new technologies, they need to further strengthen their IT-related skills, as efficient work capacity and data protection management are essential in this new era of digitalization (Rindasu 2017).

Subsequently, separate and detailed studies continue to be conducted on the benefits and risks; Peter & Martin (2016) conducted a study on how the use of cloud accounting affects the performance of SMEs and found that cloud accounting and financial systems Rudansky-Kloppers & Van den Bergh (2019) used statistical methods to analyze a questionnaire from 27 accounting firm managers on the status of cloud accounting offered by South African accounting firms, and found that compared to large firms, SMEs were more willing to adopt cloud accounting. On the other hand, Yau-Yeung et al. (2020) applied transaction cost economics to investigate the risks of cloud-based accounting systems and services in Australia and, as a result of interviews, identified four risks: legal compliance, data location, data ownership, and financial statement reliability. The four risks were the implementation of relevant policies within the organization, specifically appropriate password protection and restricting the use of mobile devices. Additionally, evaluating cloud accounting vendors, training staff, and negotiating contract terms were cited as risk mitigation strategies.

### 2) How will cloud accounting penetrate companies?

Ma et al. (2021) identified the following four factors for firm adoption. (a) Perceived benefit: This is the expected benefit of adopting cloud accounting. These factors are those related to efficiency gains and tactical and competitive benefits (competitive advantage over counterparties and related firms). (b) Organizational Readiness: To facilitate adoption, firms need to be prepared. This includes financial resources, IT sophistication, and readiness of trading partners. As for financial resources, cloud accounting does not require any upfront investment, except for the cost of initial implementation and employee training. (c) External pressure: This is an inter-organizational factor and refers to pressure from outside the company that may motivate adoption. Finally, (d) partner programs: this is a strategy to incentivize partners (accountants) with the goal that the vendor will eventually establish

itself as a strategic cornerstone in a new market (cloud accounting). Evidence from the interviews suggests that these adoption factors are supported. Sastararuji et al. (2022) also found that cloud accounting has become an increasingly important business management tool for SMEs and that by adopting cloud accounting, SMEs can become more efficient, financially organized, and flexible. The study showed that five interrelated aspects-technology, organization, environment, vendor, and management-affect the adoption and use of cloud accounting by SMEs in the context of COVID-19. During the process of cloud accounting adoption by SME owners, SME owners use the Internet to research which tools fit their situation, consider accounting features (including user experience and user interface), and then compare costs with other available tools and compare the costs of the two tools. It was noted that low cost and ease of use are more important than full functionality for SMEs, including micro and small businesses.

3) Changing Role of Professional Accountants and Educational Issues due to Advanced Digital Technology

In a study of accounting practice in a digitalized society, Frey & Osborne (2017) predicted computer automation of 702 different professions and noted that accounting practice is one of the industries of concern that will undergo significant automation. As a result, it is said that the next generation of professional accountants will have to develop a very different competency profile than the skills and knowledge acquired by the existing workforce. concerning these concerns, Moll & Yigitbasioglu (2019) surveyed previous accounting research dealing with advanced digital technologies (cloud, big data, blockchain, artificial intelligence (AI)) that have the potential to dramatically disrupt and change the work content and workplace of professional accountants today, though, As a result, the study points out that previous accounting research has underestimated how such technologies affect the work of accountants. He also stated that research is urgently needed to understand the new types of accounting needed to manage companies in the changing digital economy and to determine the new skills and competencies that accountants should acquire to remain relevant and add value (Moll & Yigitbasioglu 2019). As for the previous bookkeeping tasks performed by professional accountants, advanced digital technology will streamline and liberate them. As a result, financial analysis and advisory roles will be strengthened from previous corporate work. In conclusion, Coman et al. (2022) pointed out that the digitalization of accounting will bring about a paradigm shift in the mission/role of the professional accountant. (2022). These specifics are described in (a) through (c) below. (a) Digitization of activities in general, and financial accounting in particular, is a facilitator of communication across economic actors, from entrepreneurs and professional accountants to the state and other third parties. It also ensures business continuity and virtually

### Keita KANO

eliminates the time gap between when information is generated and when it becomes accessible to beneficiaries by providing real-time access to information in virtual rather than physical space. (b) The determinants of digitizing a business are implicitly related both to financial accounting activities and to the need for optimal organization according to the internal environment of the economic entity, the organizational culture, and the functional structure of the entity. Digitization is capable of generating data and information adapted to the information needs of users not only for business management but also for interaction with all stakeholders within the business environment, from customers and suppliers to state agencies and institutions. (c) The role of the professional accountant shifts from being a registrar of numbers, calculating taxes and fees, to being a capitalizer of data and useful information in the decision-making process and interaction with the state. This will have a positive impact on the economy as a whole, and partnerships will develop with professional accountants designed to contribute to improving the performance of economic actors.

Sugahara et al. (2022) also focused on how cloud accounting will impact the educational landscape. The content explores the role of perceived accounting image in determining the key variables that influence the acceptance of using cloud accounting as a new technology by high school students studying accounting. The Technology Acceptance Model (TAM) was employed as the theoretical framework for the study. Participants were high school accounting students enrolled in the Kyoto Subaru High School Career Course Business Game (KCB), a medium-sized commercial high school in Japan.KCB conducted a learning intervention using a business game that incorporated cloud accounting. The results showed that high school students' image of accounting as a decision-making tool was important in increasing their intention to use cloud accounting. Furthermore, Marioara et al. (2022) aimed to analyze the benefits of digitalization in education in the field of accounting from the perspective of university students and master's students in western Romania. In conclusion, the benefits of online training, such as the development of creativity, enrichment of group activities, and leadership development, are undeniable, but since reduced social contact can lead to dependency, suppression of cognitive and personal skill development, development of multitasking, and information overload, digitalization of education is necessary and represents the future of society, but is not sufficient for sustainable education.

Based on the above results, in the current state of knowledge on RQ1 digital and cloud accounting, we are extending branches from comprehensive research to individual-specific research. Among these, SMEs, the impact on business performance, and security are the most notable issues. For example, while some argue that security is an benefit, it can also be a risk. In the direction of RQ2 research, there are many comprehensive studies on cloud accounting. In the RQ2 research direction, there have been several comprehensive studies on

cloud accounting. Most of these studies used literature-based research methods. However, an increasing number of studies are now using case studies and quantitative research. Many studies have not been able to generalize their results, and it is desirable to continue to accumulate knowledge using quantitative and other methods. In addition, it is conceivable to investigate the users of cloud accounting in accounting practice about the impact on the quality of their work content. In addition, a focus on non-users would further clarify differences in attitudes toward risk. In addition, research on the role and education of accountants has been conducted in recent years. RQ3 detected gaps and future research directions include the following: Although cloud accounting research has increased in recent years, it is still not large, and more research needs to be accumulated in the future. In particular, there is still little research accumulation on the role of accountants and accounting education. For example, the importance of developing various IT-related competencies in accounting programs has been emphasized, but the skills required of professional accountants are rarely mentioned. In addition, while the analysis in this paper focused on cloud accounting, the research process revealed that a wide range of advanced digital technologies are being researched. For example, the paper covers big data, blockchain, robotic process automation (RPA), and AI. Although their contents are beyond the scope of this paper's analysis, we found that these advanced digital technologies are not evolving in only one, and a combined investigation would allow for a more detailed analysis of the digitization of accounting.

# 4. Conclusion

This study conducted a systematic review of the literature on digital cloud accounting in accounting, focusing on studies reported in major databases between 2012 and 2022. Specifically, we have looked at the current status of digital cloud accounting, its direction, and how research might develop in the future. The results of the survey indicate that there is a growing interest in research on advanced digital technologies. Although cloud accounting has been studied in many countries, early studies were often comprehensive in their content. In recent years, however, research has been conducted, including case studies, and research has been conducted on the job roles and education of accounting" to improve accounting research and excludes other advanced digital technologies from its scope; as Moll and Yigitbasioglu (2019) emphasize, big data, blockchain, and artificial intelligence are all important technologies and further insights could be provided by exploring the relevance of these technologies individually or collectively to accounting.

# Acknowledgment

This work was supported by JSPS KAKENHI Grant Number JP21K01816.

# References

- Coman, D. M., Ionescu, C. A., Duică, A., Coman, M. D., Uzlau, M. C., Stanescu, S. G. and State, V. (2022) Digitization of Accounting: The Premise of the Paradigm Shift of Role of the Professional Accountant. *Applied Sciences (Switzerland)*, Vol12(7), p.3359.
- Denyer, D. and Tranfield, D. (2009). *Producing a systematic review. In D. Buchanan & A. Bryman (Eds.).* The Sage handbook of organizational research methods, pp. 671-689. London, United Kingdom: Sage.
- Dimitriua, O. and Mateia, M. (2015) Cloud Accounting a New Business Model in a Challenging Context. Emerging Markets Queries in Finance and Business. Romania.
- Frey, C. and Osborne, M. (2017) The future of employment: How susceptible are jobs to computerisation? *Technol. Forecasting Social Change*, 114, pp.254-280.
- Ionescu, B. S., Prichici, C. and Tudoran, L. (2014) Cloud Accounting—A Technology That May Change the Accounting Profession in Romania. *Audit Financiar Journal*, 12, pp.3-15.
- Jaimovich, N. and Siu, H. E. (2019) *How automation and other forms of IT affect the middle class:* Assessing the estimates. Working Paper, Brookings.
- Kokina, J. and Blanchette, S. (2019) Early evidence of digital labor in accounting: Innovation with Robotic Process Automation. International Journal of Accounting Information Systems, 35 100431.
- Marioara, I., Valentin, B., Delia, D. and Amalia, N. S. (2022) Perception of Students and Master Students from the Western Part of Romania Over the Digitalization Process in the Accounting Education. *Studies* in Business and Economics, Vol.17(1), pp.52-72.
- Ma, D., Fisher, R. and Nesbit, T. (2021) Cloud-based client accounting and small and medium accounting practices: adoption and impact. *International Journal of Accounting Information Systems*, Vol.41.
- Moll, J. and Yigitbasioglu, O. (2019) The role of internet-related technologies in shaping the work of accountants: New directions for accounting research. *The British Accounting Review*, Vol.51, No.6, pp.1-20.
- Nedelkoska, L. and Quintini, G. (2018) Automation, skills use and training. OECD Social, Employment and Migration Working Papers No.202.
- Novais, L., Maqueira, J. M. and Ortiz-Bas, A. (2019) A systematic literature review of cloud computing use in supply chain integration. *Computers & Industrial Engineering*, 129, pp.296-314.
- Peter, C. and Martin Q. (2016) Intellectual capital and business performance. Journal of Intellectual Capital, Vol.17, pp.255-278.
- Rindasu. S-M. (2017) Emerging information technologies in accounting and related security risks what is the impact on the Romanian accounting profession. Accounting and Management Information Systems, Vol.16(4), pp.581-609.

#### 84

- Rudansky-Kloppers, S. and Van den Bergh, K. (2019) The absorption and usage of cloud accounting technology by accounting firms in Cape Town for services provided to their clients. *African Journal of Science, Technology, Innovation and Development*. Dev. 11(2), pp.161-180.
- Sastararuji, D., Hoonsopon, D., Pitchayadol, P. and Chiwamit, P. (2022) Cloud accounting adoption in Thai SMEs amid the COVID-19 pandemic: an explanatory case study. *Journal of Innovation and Entrepreneurship*, 11: 43.
- Seuring S. and Muller M. (2008) From a Literature Review to a Conceptual Framework for Sustainable Supply Chain Management. *Journal of Cleaner Production*, 16(15), pp.1699-1710.
- Sugahara, S., Kano, K. & Ushio, S. (2022) Effect of high school students' perception of accounting on their acceptance of using cloud accounting. *Accounting Education*, 1-20.
- Yau-Yeung, D., Yigitbasioglu, O. & Green, P. (2020) Cloud accounting risks and mitigation strategies: evidence from Australia. Accounting Forum, Taylor & Francis Journals, vol. 44(4), pp.421-446.
- Yigitbasioglu, O. (2015) External auditors' perceptions of cloud computing adoption in Australia. *International Journal of Accounting Information Systems*, 18, pp. 46-62.
- MM Research Institute (2022) "Survey on cloud accounting software usage (end of April 2022)" https://www.m2ri.jp/release/detail.html?id=536 (accessed 1, November, 2023)
- Gartner Japan (2021), "SaaS usage by Japanese firms at 39%, up 8% from the previous survey due to the spread of web conferencing," https://it.impress.co.jp/articles/-/21628 (accessed 1, November, 2023)